

Technical Information



LabPET4 scanner

TriFoil Imaging

Location address: EPFL AVP CP CIBM AIT CH F0-608

Contact Person:
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Description

CIBM owns an avalanche photodiode (APD) PET scanner situated adjacent to the preclinical MRI of the CIBM-AIT, ideal for investigators wishing to complement their rodent MR studies with PET measurement. All positron-emitter isotopes that can be produced off-site and transported to the CIBM can be measured. Physiology support is assured through the infrastructure of the CIBM-AIT.

Specifications

Geometry:

• ring diameter: 15.6 cm

• Aperture / Transverse field of view: 11 cm

Axial field of view: 3.7 cmSpatial Resolution: 1 mm

• Number of APD Detectors: 1536 (Phoswich pairs of LYSO and LGSO crystals)

- Fully parallel digital data processing and acquisition in PET imaging
- Static and dynamic tomographic acquisitions
- Integrated physiological monitoring system for ECG, respiration, and temperature

Additional related infrastructure

- Classified type-C working zone according to the Swiss Federal Radiological Protection Ordinance
- Proximity of CIBM MRI EPFL animalerie

Software:

- LabPET acquisition, calibration and normalisation software
- PMOD image analysis software